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WATER SUPPLY OUTLOOK FOR OREGON

MAY 20 '76
CURRENT SERIAL RECORDS

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON DEPARTMENT OF WATER RESOURCES

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
MAY 1, 1976

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-5460

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

MAY 8, 1976

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In Cooperation with

OREGON
DEPARTMENT
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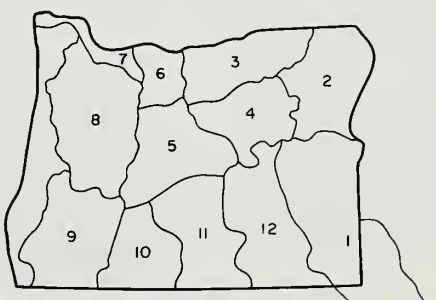
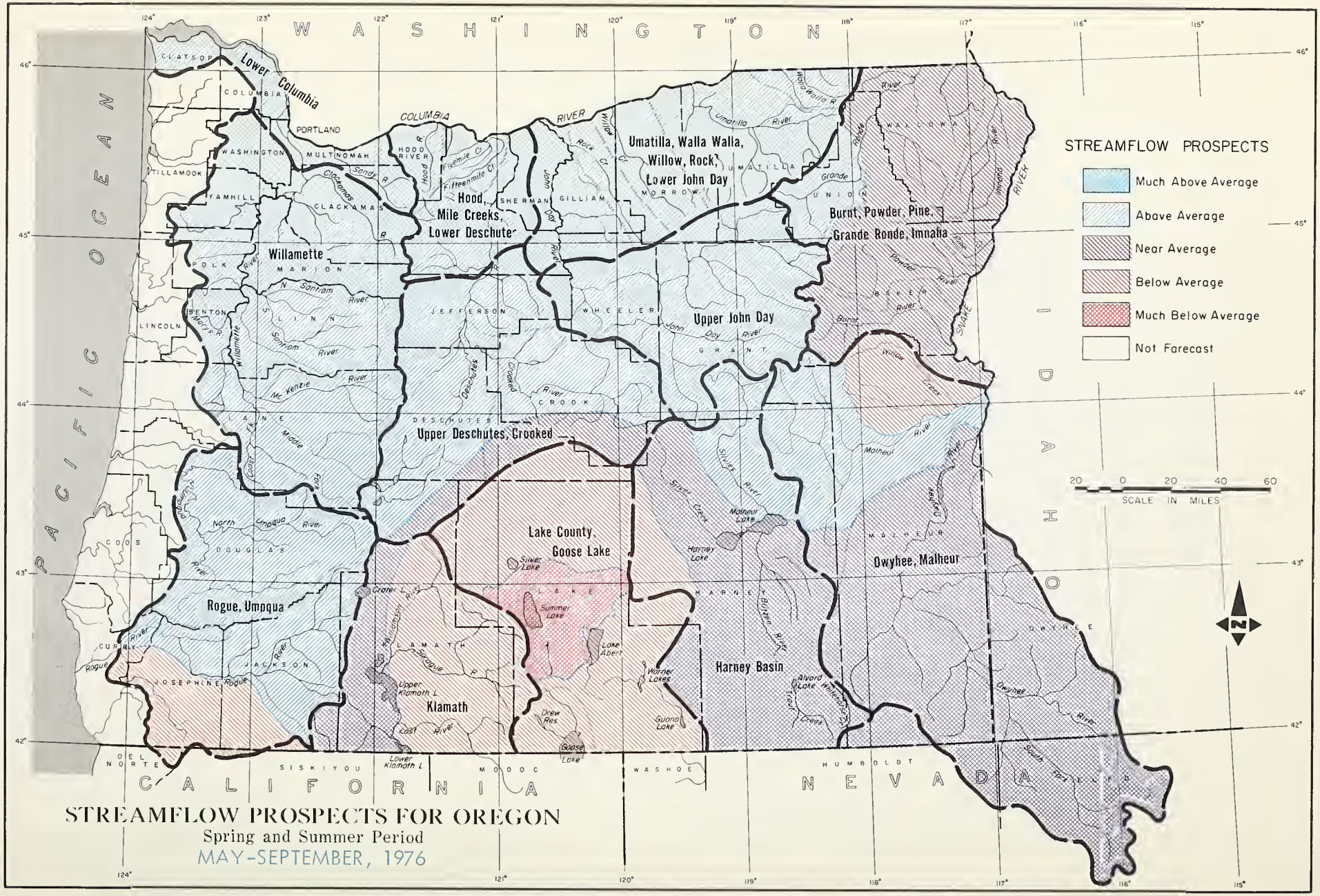


WATERSHED AREA LOCATIONS



STREAMFLOW PROSPECTS FOR OREGON

Spring and Summer Period

MAY-SEPTEMBER, 1976

WATER SUPPLY OUTLOOK for OREGON

MAY 1, 1976

Water supplies in Oregon will be good in most areas. Lake County, Eastern Klamath County and the Siskiyou Mountains will have deficient streamflow during the summer months. The high elevation snow pack is much above normal for this date, except for these areas. Most reservoirs are full or will fill.

SNOW COVER

The mountain snow pack is 150% to 200% of average in the high Cascades and the Blue Mountains above Pendleton. A snow cover of 100 to 150% exists in most other watersheds, except the Siskiyous at 75% of average, and the Upper Sprague River and Lake County watersheds at 60%.

PRECIPITATION

Precipitation this past month was quite variable over the state. The wet spot was northeast Oregon and the John Day basins which received about 1½ times the normal amount. Klamath County was the driest area during April receiving only 38% of the normal amount of precipitation.

SOIL MOISTURE

Soil moisture in the mountain watersheds is about normal for this time of year.

RESERVOIR STORAGE

Twentysix major irrigation reservoirs were storing 2,728,000 acre feet of water on May 1. This is 109% of average and 87% of capacity. Clear Lake, Gerber and Drews reservoirs will most likely not fill but water supplies from these reservoirs will still be adequate.

STREAMFLOW

Forecasted streamflow volumes as a percent of average on some representative Oregon streams are as follows:

continued on next page -

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STREAM	PERIOD	FORECAST % OF AVERAGE
Owyhee Reservoir net Inflow	May-Sept.	104
Grande Ronde @ La Grande	May-Sept.	104
Deschutes @ Benham Falls	May-Sept.	104
Willamette @ Salem	May-Sept.	124
Rogue @ Raygold	May-Sept.	110
Klamath Lake net Inflow	May-Sept.	93
Chewaucan near Paisley	May-Sept.	60

This report contains data furnished by the Oregon Department of Water Resources, U. S. Geological Survey, NOAA National Weather Service and other cooperators.

WATER SUPPLY OUTLOOK

OWYHEE, MALHEUR WATERSHEDS

OREGON

GENERAL OUTLOOK

MALHEUR COUNTY WATER SUPPLY WILL BE ADEQUATE FOR MOST USERS. ALTHOUGH APRIL AND SEASONAL PRECIPITATION HAS BEEN LESS THAN AVERAGE, 88% AND 70%, RESPECTIVELY, SNOW PACK WATER STORAGE WAS NEAR NORMAL. SNOW IS MELTING AND MANY AREAS ARE NOW BARE OF SNOW. ONLY BLUE MOUNTAIN SPRINGS AND SOUTH MOUNTAIN SNOW COURSES REPORTED SIGNIFICANT SNOW COVER AS OF MAY 1, WHICH IS NORMAL FOR THIS TIME OF YEAR. SOIL MOISTURE IS NEAR AVERAGE ON MOST REPORTING STATIONS. MAJOR RESERVOIRS ARE NOT FULL BUT BULLY CREEK, OWYHEE, AND WARMSPRINGS STORAGE IS ABOVE AVERAGE, WHILE BEULAH IS SLIGHTLY BELOW AVERAGE. STREAMFLOW FORECASTS ARE FOR SLIGHTLY HIGHER THAN AVERAGE DISCHARGE.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Bully Creek at Warmsprings	10.0	72	March-May		13.1
Malheur near Drewsey	37	115	May-July		32
	38	115	May-Sept.		33
Malheur, North Fork at Beulah	38	110	May-July		35
	43	108	May-Sept.		40
Owyhee Reservoir net Inflow	170	108	May-July	636	157
	188	104	May-Sept.	671	180

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000	May 24	May 24
	250	July 7	June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Antelope	70.0	--	--	41.5
Beulah Reservoir	60.0	47.3	54.6	51.2
Bully Creek	30.0	26.3	29.4	24.1
Owyhee	715.0	694.5	628.2	563.8
Warmsprings	191.0	173.6	175.3	140.1

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Jordan Creek	--	--	--
Malheur River	1	--	100
Owyhee River	3	--	85

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Malheur River	3	35	100
Owyhee River	4	5	95

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS

OREGON

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK FOR NORTHEASTERN OREGON IS EXCELLENT. APRIL PRECIPITATION WAS 145% OF NORMAL WHILE PRECIPITATION WAS 104% FOR THE NOVEMBER-APRIL PERIOD. SNOW WATER EQUIVALENT IS ABOVE AVERAGE, SOIL MOISTURE IS NEAR AVERAGE ON MOST REPORTING STATIONS, AND MAJOR RESERVOIRS ARE FULL OR HAVE ABOVE AVERAGE STORAGE. STREAMFLOW FORECASTS ARE FOR NEAR NORMAL DELIVERY.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Bear near Wallowa	58	100	May-Sept.		58
Burnt near Hereford	15.0	109	May-July		13.8
	16.0	108	May-Sept.		14.8
Catherine near Union	58	110	May-Sept.		53
Eagle Creek abv. Skull Creek	158	104	May-July		152
	174	105	May-Sept.		166
Grande Ronde at La Grande	95	103	May-July	185	92
	100	104	May-Sept.	191	96
Hurricane near Joseph	47	106	May-Sept.		44
Imnaha at Imnaha	246	97	May-Sept.		253
Lostine near Lostine	130	111	May-Sept.		117
Powder near Sumpter	37	92	May-July		40
	37	90	May-Sept.		41
Wallowa, East Fork near Joseph	8.5	100	May-July		8.5
	10.8	101	May-Sept.		10.7
Wallowa near Joseph	70	100	May-July		70
Wolf Creek Dam Inflow	10.1	133	May-June		7.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Phillips Lake	73.5	66.1	69.9	--
Thief Valley	17.4	17.4	17.4	17.5
Unity	25.2	24.5	21.2	25.1
Wallowa Lake	37.5	27.2	28.0	26.2

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Burnt River	1	45	103
Grande Ronde River above La Grande	3	55	135
Powder River	3	70	115
Wallowa, Imnaha, Catherine Creek	6	80	110

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Burnt, Powder	1	--	70
Grande Ronde, Catherine Creek, Imnaha River	3	110	100

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

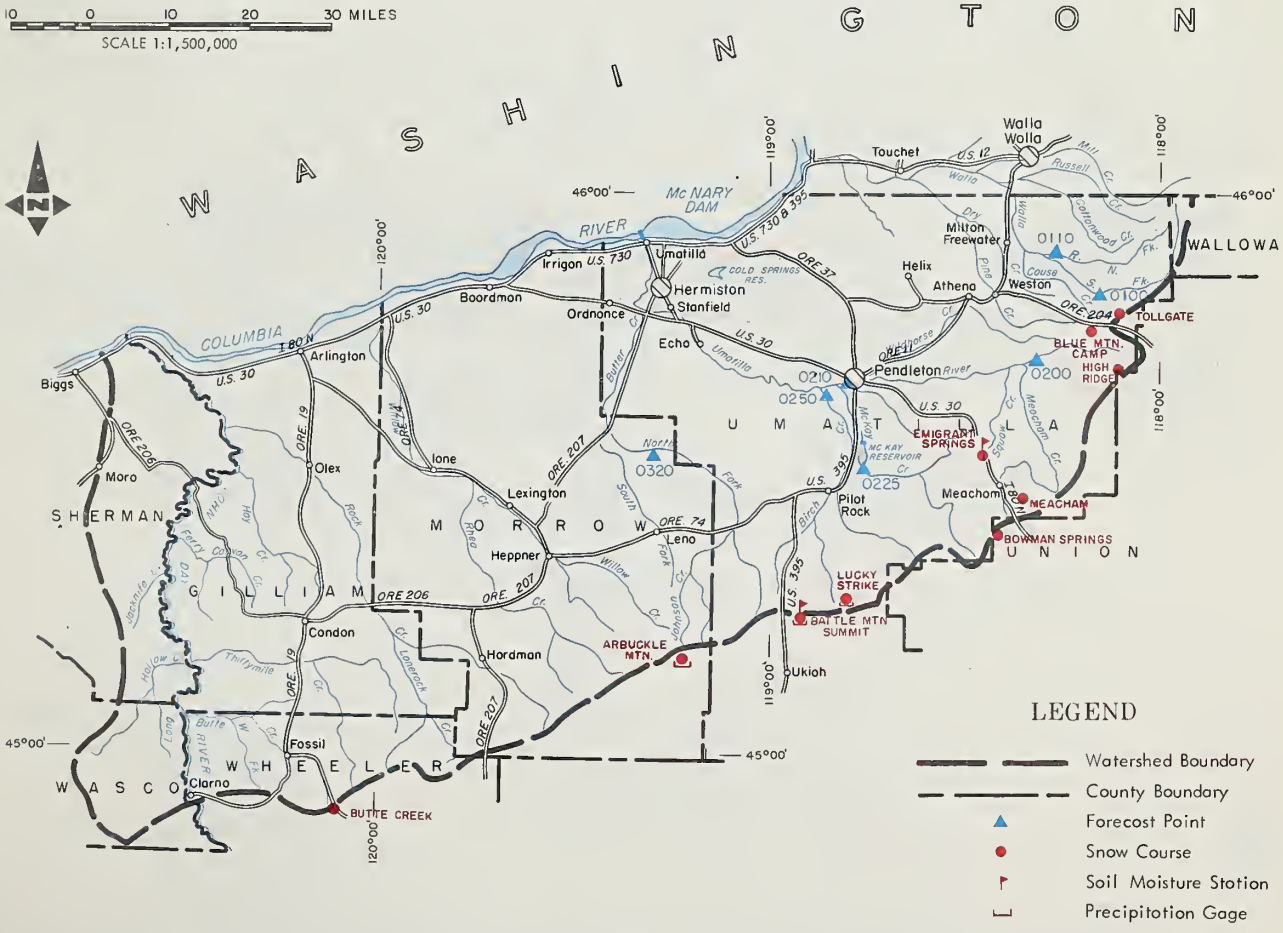
WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER CONDITIONS ARE EXCELLENT. APRIL PRECIPITATION WAS 84% OF NORMAL WHILE NOVEMBER TO APRIL PRECIPITATION HAS BEEN 99% OF NORMAL. SNOW PACK WATER STORAGE IS 150% TO 200% OF AVERAGE FOR THIS TIME OF YEAR. SOIL MOISTURE STATIONS HAVE REPORTED SLIGHTLY BELOW AVERAGE CONDITIONS. COLD SPRINGS RESERVOIR IS FULL AND MCKAY HAS ABOVE AVERAGE STORAGE. STREAMFLOW IS FORECAST TO RANGE FROM 115% TO 125% OF NORMAL.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Birch Creek at Rieth	7.1	100	May-July		7.1
Butter Creek	3.9	116	May-July		3.4
McKay near Pilot Rock	12.5	142	May-Sept.		8.8
Umatilla near Gibbon	51	129	May-July		39
	57	126	May-Sept.		45
Umatilla at Pendleton	85	125	May-July		68
Walla Walla, South Fork near Milton	58	116	May-Sept.		51

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Oate Stream Will Recede to Low Flow Value	Average Oate of Low Flow Value
Umatilla at Pendleton	550	June 1	May 22

RESERVOIR STORAGE (Thousand Ac. Ft.) ENO OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Cold Springs	50.0	50.0	49.7	49.5
McKay	73.8	66.7	66.7	57.6

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Umatilla, Walla Walla, McKay Creek	3	--	95

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHEO	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
McKay Creek	2	110	150
Umatilla River	3	--	185
Walla Walla River	2	--	200

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK
UPPER JOHN DAY WATERSHEDS
OREGON

GENERAL OUTLOOK

WATER SUPPLY OUTLOOK IS VERY GOOD. APRIL PRECIPITATION WAS 91% OF AVERAGE. PRECIPITATION FROM NOVEMBER TO APRIL WAS 142% OF AVERAGE. SOIL MOISTURE IS REPORTED TO BE NEAR NORMAL. SNOW PACK WATER EQUIVALENT IS RANGING 116% TO 118% OF AVERAGE AND STREAMFLOW IS FORECAST TO RANGE BETWEEN 105% AND 123% OF NORMAL.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Camas Creek near Ukiah	20	123	May-July		16.2
	20	120	May-Sept.		16.7
John Day, Middle Fork at Ritter	78	115	May-July		67
	82	116	May-Sept.		70
John Day, North Fork at Monument	358	105	May-July		340
	372	105	May-Sept.		354
Strawberry near Priarie City	7.0	108	May-July		6.5
	7.8	108	May-Sept.		7.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
John Day above Dayville	2	100	100
John Day, North Fork	1	--	95

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
John Day, North Fork	3	50	120
John Day abv. Dayville	3	30	125

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

UPPER DESCHUTES, CROOKED WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES IN THE DESCHUTES BASIN ARE EXPECTED TO BE GOOD FOR MOST USERS. THE SNOW COVER IS EXCELLENT IN THE CASCADES. THE MELT ON THE CASCADE'S STREAMS HAS BEEN DELAYED AND WATER CONTENTS AT THE HIGH ELEVATION COURSES INCREASED DURING THE MONTH. HOWEVER, THE SNOWMELT RUNOFF ON THE CROOKED RIVER DURING APRIL WAS ABOUT 1½ TIMES NORMAL. RESERVOIR STORAGE IS EXCELLENT AS ALL MAJOR RESERVOIRS ARE FULL. STREAM-FLOW IS EXPECTED TO BE ABOVE AVERAGE THIS SPRING AND SUMMER.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Beaver Creek near Paulina	5.3	120	May-July		4.4
	5.3	120	May-Sept.		4.6
Crane Prairie Reservoir total Inflow	80	125	May-July		64
	122	116	May-Sept.		105
Crescent at Crescent Lake	23	147	May-July	24	15.6
	27	138	May-Sept.	31	19.6
Crooked near Post	38	115	May-July		32
Deschutes at Benham Falls	307	109	May-July		281
	492	104	May-Sept.		471
Deschutes below Snow Creek	68	121	May-Sept.	77	56
Deschutes, Little near La Pine	62	116	May-July	90	53
	72	114	May-Sept.	105	63
Ochoco Reservoir net Inflow	14.0	152	May-Sept.		9.2
Odell near Crescent	30	130	May-Sept.		23
Squaw near Sisters	49	106	May-Sept.		46
Tumalo near Bend	49	126	May-Sept.	54	39

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	300	Sept. 25	July 15
Crooked R. near Post	100	June 2	June 1
Deschutes at Bend	1500	July 7	July 1
Little Deschutes near La Pine	400	June 4	June 7
	200	June 27	July 8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Crane Prairie	55.3	56.7	56.1	42.4
Crescent Lake	86.9	84.2	--	52.3
Ochoco	47.5	46.8	39.0	36.8
Prineville	153.0	153.6	150.6	146.8
Wickiup	200.0	200.4	201.9	188.5

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Crooked R., Upper Deschutes River	1	100	100

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Crooked, Ochoco	--	--	--
Deschutes abv. Wickiup	1	85	125
Little Deschutes	4	75	145
Tumalo & Squaw Crs.	2	75	125

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES ARE EXPECTED TO BE GOOD. THE MAY 1 SNOW COVER ON MT. HOOD IS EXCELLENT DUE TO DELAYED MELTING AND AN INCREASE IN WATER CONTENT AT THE HIGH ELEVATION SNOW COURSES. STREAMFLOW IS EXPECTED TO BE ABOVE AVERAGE THIS SPRING AND SUMMER.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Hood, West Fork near Dee	95	112	May-July		85
	122	114	May-Sept.		107
White below Tygh Valley	95	120	May-July		79
	113	120	May-Sept.		94

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	*45	July 15-31	**39

* Average cfs forecast to flow for this two-week period.

** Average cfs for period of record.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Clear Lake (Wasco)	11.9	10.8	10.0	4.6

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Hood River	2	100	170
Mile Creeks	--	--	--
White River	2	100	170

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average.((d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

LOWER COLUMBIA WATERSHEDS

OREGON

G E N E R A L O U T L O O K

THE WATER SUPPLY OUTLOOK ALONG THE LOWER COLUMBIA IS EXCELLENT. THE SNOWPACK IS AVERAGE TO ABOVE AVERAGE OVER MOST OF THE COLUMBIA BASIN. SNOWPACKS NEARLY TWICE NORMAL FOR MAY 1 WERE MEASURED ON THE WENATCHEE RIVER IN WASHINGTON AND THE TETON DRAINAGE IN WYOMING. PRECIPITATION WAS SLIGHTLY BELOW AVERAGE THIS PAST MONTH OVER MUCH OF THE COLUMBIA EXCEPT IN SOUTHERN IDAHO AND NORTH EASTERN OREGON WHERE IT WAS ABOVE. THE GOOD SNOW COVER IS PARTLY DUE TO DELAYED MELT AT THE HIGHER ELEVATIONS. STREAMFLOW IS EXPECTED TO BE GOOD AS THE COLUMBIA AT THE DALLES IS FORECAST TO FLOW AT 109%.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average [c]
Sandy River	1	110	170

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Columbia at The Dalles	83,000	108	May-July	84,141	76,815
	99,800	109	May-Sept.	98,825	91,550
Sandy River near Marmot	265	116	May-July		227
	320	113	May-Sept.		282

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW [d] (1,000 A F) APR — SEPT.	APR — JUNE	MAY — JUNE	REGULATED PEAK (1,000 c f s)	DATE
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1968	89,000	55,500	47,900	404	June 13
1969	112,300	85,700	63,800	515	May 15
1970	88,100	62,800	55,200	425	May 28
1971	122,900	88,400	73,700	557	May 13
1972	134,700	96,400	81,400	619	June 20
1958-72 Avg.	104,300	72,900	59,900	529	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu)	FLOW AT THE DALLES (1,000 c.f.s)	DRAINAGE DISTRICT PUMPHOUSE SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES 118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Estimated (b) 1958-72 adjusted averagel (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK
WILLAMETTE WATERSHEDS
OREGON

GENERAL OUTLOOK

WATER SUPPLIES IN THE WILLAMETTE VALLEY WILL BE GOOD THIS SUMMER. THE SNOWPACK IN THE CASCADES IS MUCH ABOVE NORMAL BECAUSE OF DELAYED MELT AND AN INCREASE IN WATER CONTENT AT THE HIGH ELEVATION SNOW COURSES. PRECIPITATION WAS 80% OF NORMAL THIS PAST MONTH BUT HAS BEEN NEAR AVERAGE SINCE NOVEMBER. STREAMFLOW THIS SPRING AND SUMMER IS EXPECTED TO BE ABOVE AVERAGE.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Clackamas at Estacada	492	110	May-July		447
	613	109	May-Sept.		562
Clackamas above Three Lynx	393	114	May-July		343
	491	111	May-Sept.		440
McKenzie at McKenzie Bridge	411	125	May-July		329
	583	123	May-Sept.		474
McKenzie near Vida	880	120	May-July		720
	1136	120	May-Sept.		947
McKenzie, So. Fork near Rainbow	183	130	May-July		140
	221	131	May-Sept.		169
Oak Grove Fork above Power Intake	102	115	May-July		89
	147	115	May-Sept.		128
Row near Dorena	61	115	May-July		53
	67	115	May-Sept.		58
Santiam, North at Mehama	640	130	May-July		493
	768	128	May-Sept.		600
Santiam, South at Waterloo	400	124	May-July		323
	458	120	May-Sept.		382
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge	600	130	May-July	749	462
	719	128	May-Sept.	856	562
Willamette, No. Fk., of Mid. Fk. near Oakridge	143	118	May-July		121
	161	114	May-Sept.		141
Willamette at Salem	3382	129	May-July		2619
	3915	124	May-Sept.		3165

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Clackamas River	1	80	180
McKenzie River	3	95	150
Row River	2	85	145
Santiam River	4	105	160
Willamette, Mid. Fk.	4	90	145

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Blue River	85.6*	73.3	71.9	--
Cottage Grove	30.0*	23.5	23.7	23.4
Cougar	155.2*	131.8	108.4	108.6
Detroit	299.9*	221.4	228.8	250.2
Dorena	70.5*	53.5	52.8	54.8
Fall Creek	115.0*	97.0	98.5	96.7
Fern Ridge	94.2*	95.0	94.2	86.7
Foster	30.0*	9.7	10.0	18.6
Green Peter	270.0*	217.4	225.7	199.9
Henry Hagg Lake	53.0	53.6	53.0	--
Hills Creek	200.0*	153.0	129.6	157.9
Lookout Point	337.2*	226.5	250.0	257.5
Timothy Lake	61.7	56.7	58.9	57.5

* Multiple purpose reservoir--space reserved primarily for flood runoff.

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

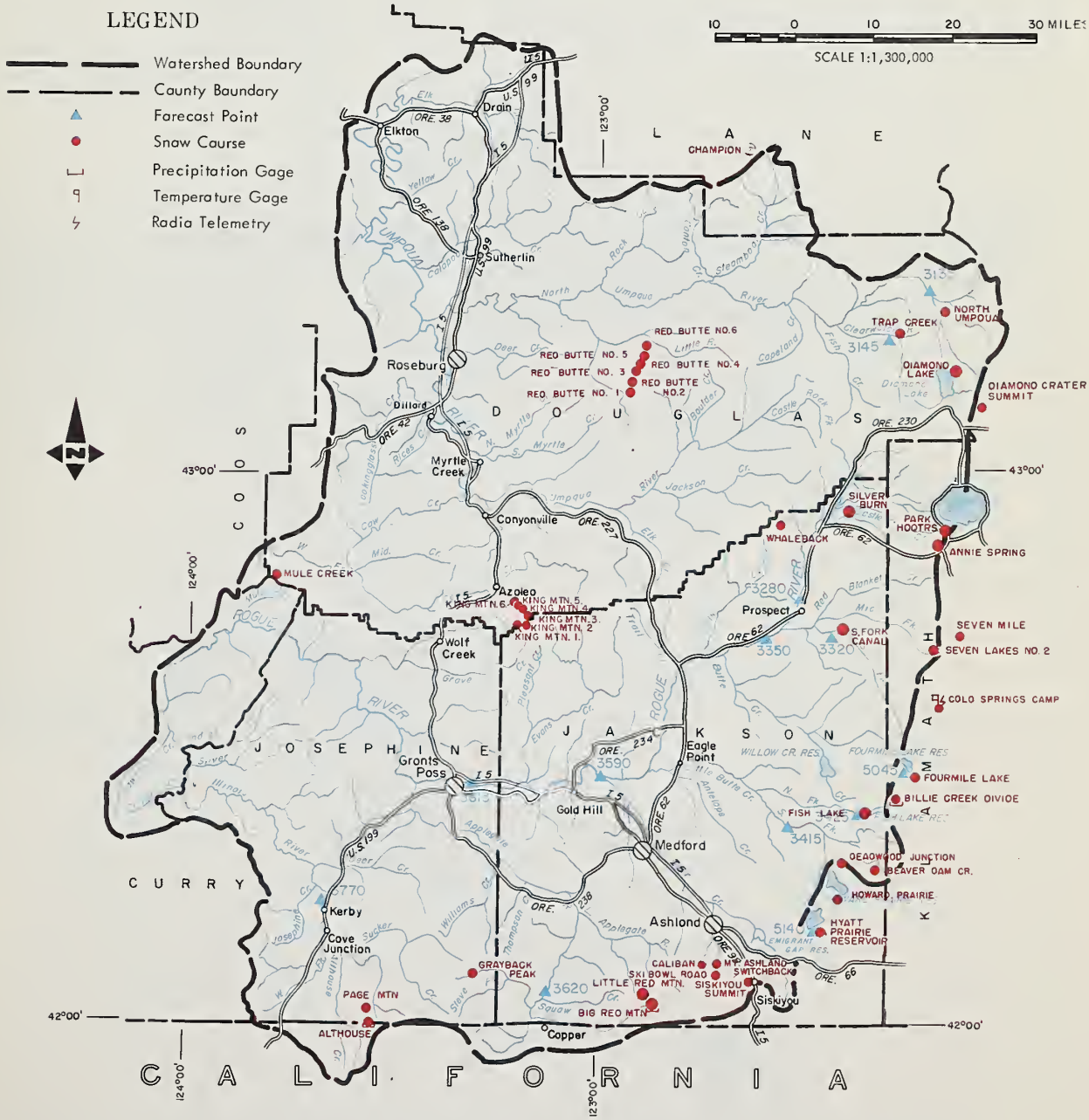
WATER SUPPLY OUTLOOK

ROGUE, UMPQUA, WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES IN THE ROGUE AND UMPQUA VALLEYS SHOULD BE ADEQUATE FOR USERS ON THE MAJOR RIVERS DRAINING FROM THE CASCADES. LATE SEASON SHORTAGES WILL OCCUR ON THE SISKIYOU MOUNTAIN WATERSHEDS. THE SNOW COVER IS GOOD EXCEPT IN THE SISKIYOUS WHERE IT IS ABOUT 75% OF NORMAL. PRECIPITATION THIS PAST MONTH WAS 80% OF AVERAGE. MAJOR RESERVOIRS ARE FULL AND STREAMFLOW IS EXPECTED TO BE SLIGHTLY ABOVE AVERAGE EXCEPT AGAIN IN THE SISKIYOUS.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Applegate near Copper	65	80	May-July		81
	74	85	May-Sept.		87
Clearwater above Trap Creek	65	114	May-Sept.		57
Fourmile Lake net Inflow	5.9	198	May-July		3.0
Hyatt Reservoir net Inflow	3.5	159	May-July		2.2
Illinois River near Kerby	73	80	May-July		91
	78	80	May-Sept.		97
Little Butte, N. Fk. at Fish Lake nr. Lake Cr.	12.8	110	May-Sept.		11.6
Little Butte, S. Fk. near Lake Creek	20	124	May-July		16.1
	22	120	May-Sept.		18.4
Rogue above Prospect	204	110	May-July		184
	262	109	May-Sept.		239
Rogue, South Fork near Prospect	52	114	May-July		46
	64	114	May-Sept.		56
Rogue at Raygold near Central Point	542	110	May-July	767	493
	713	110	May-Sept.	946	648
Rogue at Grants Pass	690	110	May-Sept.		627
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls	154	111	May-Sept.		139

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	100	May 24	May 27
Rogue at Raygold	1200	Sept 2	Aug 7
	*2006	July 1	
	*1280	Aug 15	

* Average daily cfs forecast to flow on this date.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Emigrant Lake	39.0	39.0	38.8	37.0*
Fish Lake	8.0	7.4	7.7	6.0
Fourmile Lake	16.1	13.4	13.6	10.7
Howard Prairie	60.0	60.6	49.2	44.9
Hyatt Prairie	16.1	16.3	14.3	14.0

* Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Applegate	--	--	--
Bear Creek	1	55	75
Butte Creek	2	85	220
Illinois River	--	--	--
North Umpqua	3	65	195
Rogue River	4	80	145

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON

GENERAL OUTLOOK

WATER SUPPLIES IN KLAMATH COUNTY WILL GENERALLY BE ADEQUATE EXCEPT ON THE UPPER SPRAGUE RIVER AND OTHER SMALL STREAMS IN THE EASTERN PART OF THE COUNTY. USERS WITH STORED WATER AVAILABLE WILL HAVE ADEQUATE SUPPLIES. SNOW COVER IS ABOVE AVERAGE EXCEPT ON THE SPRAGUE RIVER WHERE IT IS 60% OF AVERAGE. PRECIPITATION THIS PAST MONTH WAS ONLY 35% OF NORMAL CONTINUING A DRIER THAN NORMAL TREND THAT HAS PERSISTED THROUGH THE WINTER. STORED WATER SUPPLIES ARE GOOD.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Clear Lake Reservoir Inflow	12.3	81	May-Sept.		15.1
Gerber Reservoir Inflow	4.0	83	May-Sept.		4.8
Sprague near Chiloquin	133	80	May-Sept.		166
Upper Klamath Lake net Inflow	328	93	May-Sept.	529	353
Williamson below Sprague River	250	87	May-Sept.		287

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [c]
Upper Klamath	1	110	95

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Clear Lake	440.2	300.2	361.2	266.5
Gerber	94.0	74.8	87.4	68.5
Upper Klamath Lake	584.0	467.8	472.0	517.4

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [c]
Lost River	2	40	140
Sprague River	2	25	60
Upper Klamath	5	55	130
Williamson River	2	55	140

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES IN LAKE COUNTY WILL BE BELOW AVERAGE THIS NEXT SUMMER EXCEPT FOR THOSE USERS WITH STORED WATER AVAILABLE. SNOW COVER IS GOOD AT THE HIGHEST ELEVATIONS BUT ABOUT HALF OF AVERAGE ELSEWHERE. PRECIPITATION THIS PAST MONTH WAS SEVENTY PERCENT OF AVERAGE CONTINUING THE DRY TREND THAT PERSISTED THROUGH THE WINTER. STREAMFLOW IS EXPECTED TO BE BELOW AVERAGE. DREWS RESERVOIR WILL PROBABLY NOT FILL BUT SUPPLIES FOR LAKEVIEW WATER USERS ASSOCIATION SHOULD BE ADEQUATE.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Chewaucan near Paisley	34	60	May-July	82	56
	36	60	May-Sept.	86	60
Deep above Adel	34	79	May-July	83	43
	36	80	May-Sept.	86	45
Drews Reservoir net Inflow	7.8	80	May-July		9.7
Honey Creek near Plush	9.0	80	May-July		11.3
	9.1	80	May-Sept.		11.4
Silver Creek near Silver Lake	8.0	75	May-July		10.7
Twentymile near Adel	8.9	80	May-Sept.		11.1

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average [c]
Chewaucan, Silver Creek, Drew Creek	1	110	95
Honey, Deep, 20-Mi. Cr.	1	105	90

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [c]
Cottonwood	8.7	5.4	3.5	6.7*
Drews	63.0	56.8	60.5	55.3
Thompson Valley	19.5	17.4	--	--

* Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average [c]
Chewaucan River	2	25	60
Deep Creek	2	40	125
Drew Creek	2	5	70
Honey Creek	1	10	50
Silver Creek	--	--	--
Twentymile Creek	--	--	--

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

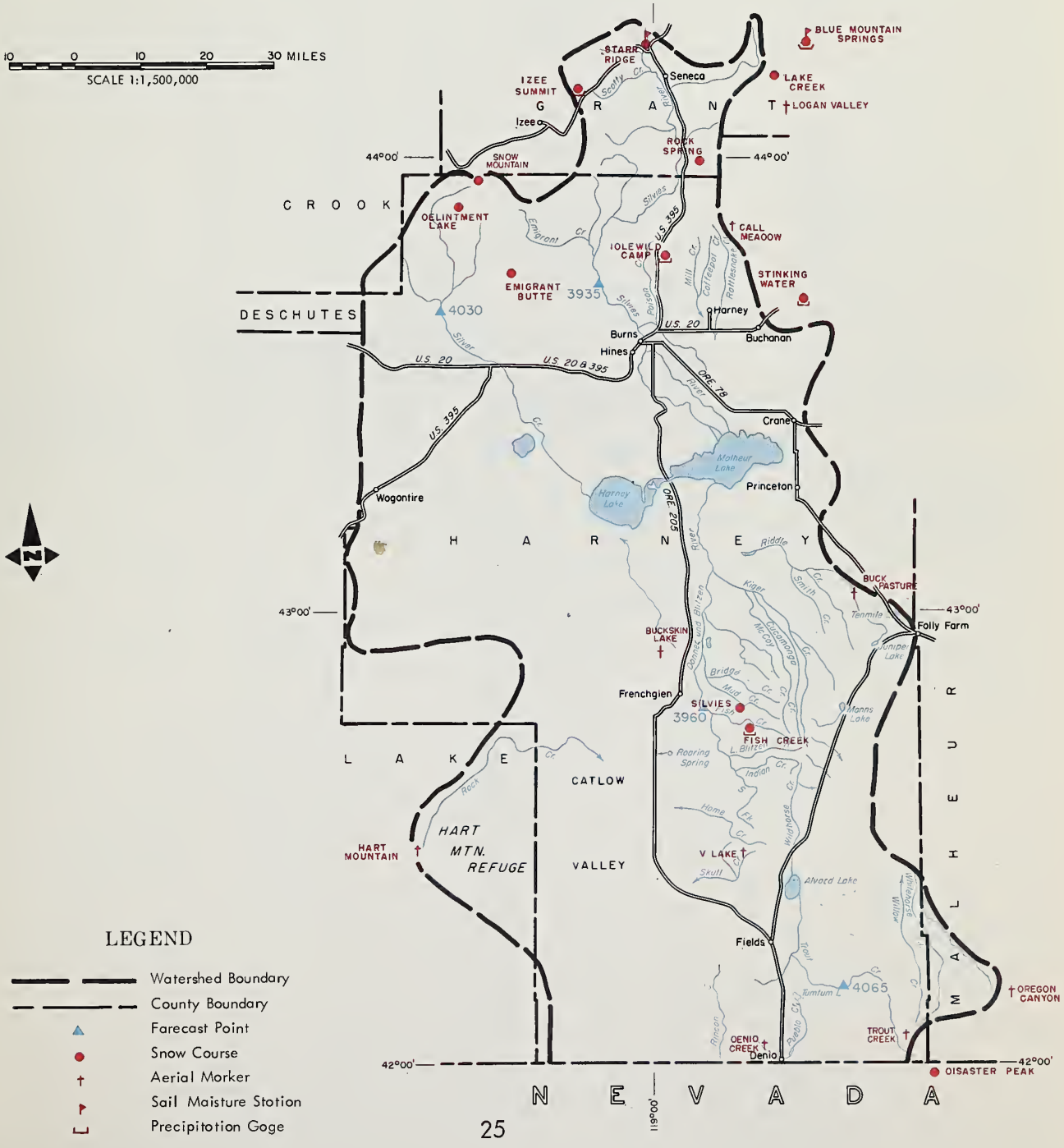
WATER SUPPLY OUTLOOK

HARNEY BASIN WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES SHOULD BE ADEQUATE. SOME LATE SEASON SHORTAGES MAY OCCUR ON STREAMS HEADING UP AT LOWER ELEVATIONS. SNOW COVER ON THE SILVIES DRAINAGE IS ABOVE AVERAGE FOR MAY 1. PRECIPITATION THIS PAST MONTH WAS NORMAL. STREAMFLOW IS EXPECTED TO BE NEAR NORMAL ON MOST OF THE MAJOR DRAINAGES.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [c]
Donner und Blitzen near Frenchglen	40	106	May-July		37
	44	104	May-Sept.		42
Silver near Riley	5.5	107	May-July		5.1
Silvies River near Burns	38	115	May-July	95	33
	40	115	May-Sept.	98	35
Trout Creek near Denio	5.8	100	May-July		5.8
	6.2	100	May-Sept.		6.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average [c]
Silvies River, Silver Cr.	1	--	100
Trout Cr., Donner und Blitzen River	--	--	--

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average [c]
Donner und Blitzen R.	--	--	--
Silver Creek	--	--	--
Silvies River	3	30	30
Trout Creek	--	--	--

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 1

MAY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[c]
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	No	report		--	--
Battle Creek (Ida.)***		e		--	--
Bear Creek (Nev.)	4/28	71	26.8	32.6	20.1
Big Bend (Nev.)	4/28	10	3.1	16.6	1.3
Blue Mountain Springs	4/30	20	10.5	23.0	10.2
Blue Mtn. Springs Pillow*	4/30	--	14.0	--	--
Buck Pasture***		e		--	--
Buckskin, Lower (Nev.)		e		--	--
Buckskin, Upper (Nev.)		e		--	--
Bull Basin (Ida.)***		e		--	--
Bully Creek ***		e		--	--
Call Meadow***		e		--	--
Columbia Basin (Nev.)***		e		--	--
Cottonwood-Indian***		e		--	--
Disaster Peak (Nev.)		e		--	--
Eldorado Pass	4/26	0	0.0	0.0	0.0[b]
Fawn Creek (Nev.)		e		--	--
Fish Creek		e		--	--
Fish Creek***		e		--	--
Flag Prairie***		e		--	--
Fox Creek (Nev.)		e		--	--
Fry Canyon (Nev.)	4/28	1	0.1	11.7	1.1
Gold Creek (Nev.)	4/28	2	0.5	10.0	0.3
Granite Peak (Nev.)		e		--	--
Hyde Pasture (Ida.)***		e		--	--
Jack Creek, Lower (Nev.)	4/28	2	0.4	18.8	0.1
Jack Creek, Upper (Nev.)	4/28	12	3.7	18.8	3.4
Jack Peak (Nev.)	4/28	84	31.3	42.1	26.7
Lake Creek R.S.		e		11.6	--
Laurel Draw (Nev.)***		e		--	--
Logan Valley***		e		--	--
Lookout Butte***		e		--	--
Louse Canyon***		e		--	--
Martin Creek (Nev.)		e		--	--
Merritt Mountain (Nev.)***		e		--	--
Midas (Nev.)		e		--	--
Mud Flat (Ida.)	No	report		--	--
Oregon Canyon***		e		--	--
Quinn Ridge (Nev.)***		e		--	--
Red Canyon (Ida.)***		e		--	--
Rock Spring	4/29	0	0.0	5.8	0.3[b]
Rodeo Flat (Nev.)	4/28	3	0.9	11.6	1.1
76 Creek (Nev.)***	4/28	25	8.1	--	--
Silver City (Ida.)	4/30	30	11.3	--	8.9[b]
Silver City***		e		--	--
Silvies		e		--	--
Silvies***		e		--	--
South Mountain #2 (Ida.)	5/2	15	6.8	--	7.1
Stag Mountain (Nev.)***		e		--	--
Stinking Water	4/30	0	0.0	--	0.0
Succor Creek (Ida.)***		e		--	--
Taylor Canyon (Nev.)	4/28	0	0.0	7.0	0.1
Toe Jam (Nev.)***		e		--	--
Tremewan Ranch (Nev.)		e		--	--
Triangle (Ida.)***	No	report		--	--
Trout Creek***		e		--	--
"V" Lake		e		--	--
Vaught Ranch (Ida.)***		e		--	--
War Eagle (Ida.)***		e		--	--

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[c]
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #1	4/28	100	40.2	46.8	40.7
Aneroid Lake #2	4/28	89	35.0	43.2	36.2
Anthony Lake	4/28	89	36.2	--	30.4
Bald Mountain (Ore.)***	4/28	84	31.9	40.0	22.5
Beaver Reservoir	4/30	33	11.9	16.7	9.2
Big Sheep***	4/28	52	19.8	38.5	24.5
Blue Mtn. Summit	4/30	6	2.3	--	1.7
Bourne	4/30	24	10.6	--	--
Bourne Pillow	4/30	45	16.8	--	--
County Line	4/30	3	1.1	5.1	0.4
Dooley Mountain	4/28	0	0.0	1.4	2.1
Eilertson Meadows	4/30	15	5.7	--	4.7
Eldorado Pass	4/26	0	0.0	0.0	0.0[b]
Gold Center	4/30	11	4.2	12.0	4.4
Goodrich Lake	4/30	81	35.8	--	38.5
Little Alps	4/28	46	15.4	20.1	13.7[b]
Little Antone	4/28	0	0.0	--	0.0
Little Antone Alternate	4/28	6	2.2	--	--
Lucky Strike	4/30	22	9.7	14.7	9.2[b]
Meacham	4/29	15	6.7	--	1.8
Mirror Lake***	4/28	221	92.8	83.2	79.3
Moss Spring	4/28	82	31.0	40.2	23.3
Schneider Meadow	4/28	62	26.1	40.5	25.4[b]
Schoolmarm	4/30	0	0.0	2.2	0.1[b]
Standley***	4/28	107	42.8	44.4	35.3
Taylor Green	4/28	46	17.6	25.8	12.8[b]
Tipton	4/30	T	0.0	--	1.8
Tipton Snow Pillow*	4/30	27	11.0	--	--
Tollgate	4/28	70	33.6	--	19.2
TV Ridge***	4/28	78	30.4	31.1	25.2
West Eagle Meadows	4/28	50	19.0	--	--
UMATILLA, WALLA WALLA, WILLOW, ROCK LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	4/30	8	4.0	--	2.8
Arbuckle Mtn. Pillow*	4/30	--	25.2	25.2	--
Blue Mountain Camp	4/28	29	14.8	--	5.1[b]
Bowman Springs	No	report		--	--
Butte Creek Summit		e		--	--
Emigrant Springs	4/29	0	0.0	--	0.4
High Ridge	4/30	80	38.4	38.2	--
Lucky Strike	4/30	22	9.7	14.7	9.2[b]
Meacham	4/29	15	6.7	--	1.8
Tollgate	4/28	70	33.6	--	19.2

BASIC DATA SUPPLEMENT 1

MAY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[c]
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	4/28	89	36.2	40.7	30.4
Arbuckle Mountain	4/30	8	4.0	--	2.8
Arbuckle Mt. Pillow*	4/30	--	25.2	25.2	--
Blue Mountain Springs	4/30	20	10.5	23.0	10.2
Blue Mt. Springs Pillow*	4/30	--	14.0	--	--
Blue Mountain Summit	4/30	6	2.3	--	1.7
Butte Creek Summit		e		--	--
Derr		e		--	--
Gold Center	4/30	11	4.2	12.0	4.4
Indian Creek Butte***		e		--	--
Izee Summit	4/29	8	3.0	17.1	1.9
Lucky Strike	4/30	22	9.7	14.7	9.2[b]
Marks Creek	5/3	0	0.0	1.0	0.0[b]
Ochoco Meadows		e		--	--
Olive Lake		e		21.1	26.6
Schoolmarm	4/30	0	0.0	2.2	0.1
Snow Mountain		e		--	--
Snow Mt. Pillow**	No report			--	--
Starr Ridge	4/29	4	2.1	8.1	0.4
Tipton	4/30	T	0.0	--	1.8
Tipton Snow Pillow*	4/30	27	11.0	--	--
UPPER DESCHUTES, CROOKED WATERSHEDS					
Bald Peter	4/30	110	49.6	51.0	--
Caldwell Ranch		e		--	--
Cascade Summit	4/28	88	38.2	45.3	24.8
Chemult	5/1	0	0.0	10.0	0.8[b]
Chemult Alternate	5/1	0	0.0	13.2	--
Derr		e		--	--
Hogg Pass	4/29	116	53.2	55.4	41.3
Hyngry Flat	4/28	0	0.0	0.0	0.0
Irish-Taylor Pillow**	No report			--	--
Lionshead***	4/30	35	12.2	--	--
Marks Creek	5/3	0	0.0	1.0	0.0[b]
New Crescent Lake	4/28	27	11.2	18.7	4.4
New Dutchman Flat #2	4/27	141	66.8	76.8	54.0
Ochoco Meadows		e		--	--
Racing Creek	4/30	40	14.0	20.0	--
Snow Mountain		e		--	--
Snow Mountain Pillow**	No report			--	--
Summit Lake		e		61.1	42.3
Summit Lake Pillow**	4/30	--	36.8	51.8	--
Tamarack		e		--	--
Tangent	4/27	41	16.9	34.5	12.3
Three Creek Butte	4/29	13	5.0	4.6	1.6
Three Creek Meadow	4/29	48	19.2	--	13.7
Three Creek Mdw. Pillow**	4/29	64	25.0	--	--
Waldo Lake		e		--	--
Whitewater Meadow	4/30	0	0.0	0.0	--

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[c]
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows		e		--	--
Clear Lake	4/30	23	8.9	11.4	5.0
Clear Lake (Experimental)	4/30	40	17.2	--	9.7[b]
Greenpoint		e		--	--
Greenpoint Pillow	No report				
Knebal Springs		e		--	--
Mt. Hood Test Site**	4/30	--	83.1	--	67.6
Mud Ridge	4/29	85	40.2	--	--
Mud Ridge Pillow	4/29	--	49.2	--	--
Red Hill		e		--	--
Red Hill Pillow		e		--	--
Still Creek	4/29	78	34.2	31.2	20.1
Switchback		e		--	--
Tilly Jane		e		--	--
Ulrich Ranch Junction		e		--	--
Umbrella Falls	4/27	176	81.4	71.2	70.7[b]
WILLAMETTE WATERSHEDS					
Cascade Summit	4/28	88	38.2	45.3	24.8
Champion	4/26	94	41.9	49.9	26.9
Clackamas Lake		e		--	--
Clear Lake	4/30	23	8.9	11.4	5.0
Clear Lake (Expt.)	4/30	40	17.2	--	9.7[b]
Dead Horse Grade	4/30	44	20.2	25.3	11.0
Detroit (Town)	4/29	0	0.0	0.0	0.0
Detroit Dam	4/29	0	0.0	0.0	0.0
Golden Curry Creek	4/26	0	0.0	T	1.9
Hogg Pass	4/29	116	53.2	55.4	41.3
Lake Harriet	4/26	0	0.0	0.0	--
Laurel Mountain	4/30	14	6.4	7.0	--
Layng Creek	4/26	0	0.0	0.0	0.0
Lookout Point Dam		e		0.0	0.0
Lost Creek Ranch		e		0.0	0.0
Lund Park	4/26	0	0.0	0.0	0.0[b]
Marion Forks	4/29	34	14.3	10.7	5.0[b]
Marys Peak		e		--	--
McCredie Springs		e		0.0	0.0
McKenzie	4/30	130	64.2	64.8	44.9
McKenzie Bridge		e		0.0	0.0
Mill City	4/29	0	0.0	0.0	0.0
Mt. Hood Test Site**	4/30	--	83.1	--	67.6
Mud Ridge	4/29	85	40.2	--	--
Mud Ridge Pillow	4/29	--	49.2	--	--
Oakridge		e		--	--
Peavine Ridge Pillow**	4/30	--	20.6	--	11.6[b]
Railroad Overpass	4/28	0	0.0	0.0	0.0
Saddle Mountain Pillow**	4/30	--	7.7	8.4	--
Salt Creek Falls	4/28	47	18.9	20.8	9.6
Santiam Junction	4/29	61	29.3	26.2	13.3
Santiam Junction Pillow	No report			--	--
Seine Creek Pillow**	4/30	--	0.0	0.0	--
Still Creek	4/29	78	34.2	31.2	20.1
Summit Lake		e		61.1	42.3
Summit Lake Pillow**	4/30	--	36.8	51.8	--
Timothy Lake	4/26	48	19.5	17.0	10.7
Valsetz Summit	4/30	0	0.0	0.0	--
Vida		e		0.0	0.0
Waldo Lake		e		--	--
Weaver Creek	4/26	0	0.0	0.0	0.0
White Branch Slide	4/30	0	0.0	0.0	0.4
Whitewater Bridge	4/30	0	0.0	0.0	0.0

BASIC DATA SUPPLEMENT 1

MAY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave.[c]
ROGUE, UMPQUA WATERSHEDS					
Althouse		e		--	--
Annie Spring	4/30	103	40.4	61.9	44.4
Beaver Dam Creek	4/30	0	0.0	30.1	7.3
Big Red Mountain		e		--	--
Billie Creek Divide	4/26	58	25.0	21.4	12.0[b]
Caliban	4/28	74	30.5	55.3	39.4
Caliban (Alternate)	4/28	74	29.2	50.8	--
Champion	4/26	94	41.9	49.9	26.9
Cold Spgs. Camp Pillow**	No report			--	--
Deadwood Junction	4/30	0	0.0	14.2	2.8
Diamond-Crater Summit	4/27	92	39.0	49.4	29.9[b]
Diamond Lake	4/27	62	24.8	34.9	16.7
Fish Lake	4/26	35	14.6	24.6	6.2[b]
Fourmile Lake	4/26	54	22.2	27.5	19.7[b]
Grayback Peak		e		--	--
Howard Prairie Reservoir	4/30	0	0.0	14.0	2.4
Hyatt Prairie	4/30	0	0.0	14.9	--
King Mountain #1	4/28	5	2.0	22.5	5.5
King Mountain #2	4/28	0	0.0	15.1	3.1
King Mountain #3	4/28	0	0.0	0.0	0.0
King Mountain #4	4/28	0	0.0	0.0	0.0
King Mountain #5	4/28	0	0.0	0.0	0.0
King Mountain #6	4/28	0	0.0	0.0	0.0
Little Red Mountain		e		--	--
Mt. Ashland Switchback	4/28	73	28.8	52.1	37.6
Mule Creek	4/28	0	0.0	7.0	--
North Umpqua	4/28	34	15.2	20.4	4.6[b]
Page Mountain		e		--	--
Park Headquarters	4/30	151	60.1	83.6	61.2
Red Butte #1	4/26	43	19.1	26.0	11.7
Red Butte #2	4/26	20	9.0	18.3	3.7[b]
Red Butte #3	4/26	0	0.0	2.7	1.2[b]
Red Butte #4	4/26	0	0.0	0.0	0.0
Red Butte #5	4/26	0	0.0	0.0	0.0
Red Butte #6	4/26	0	0.0	0.0	0.0
Seven Mile		e		--	--
Silver Burn	4/30	0	0.0	11.8	3.3
Siskiyou Summit	4/27	0	0.0	--	--
Ski Bowl Road	4/28	55	22.2	50.0	25.4
South Fork Canal	4/30	0	0.0	--	0.0
Trap Creek	4/28	22	9.7	18.6	4.2[b]

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave.[c]
KLAMATH WATERSHEDS					
Annie Spring	4/30	103	40.4	61.9	44.4
Billie Creek Divide	4/26	58	25.0	21.4	12.0[b]
Chemult	5/1	0	0.0	10.0	0.8[b]
Chemult (Alternate)	5/1	0	0.0	13.2	--
Chiloquin (PP&L)		e		--	--
Cold Spgs. Camp Pillow**	No report			--	--
Crazyman Flat***	4/26	10	3.0	20.1	5.4
Crowder Flat (Calif.)		e		--	--
Crystal (PP&L)		e		--	--
Diamond-Crater Summit	4/27	92	39.0	49.4	29.9[b]
Diamond Lake Junction (97)	4/27	62	24.8	5.1	0.0
Dog Hollow***		e		--	--
Finley Corrals***	4/26	24	7.9	19.8	9.0
Fort Klamath (PP&L)		e		--	--
Fourmile Lake	4/26	54	22.2	27.5	19.7[b]
Gerber		e		--	--
Harriman (PP&L)		e		--	--
Howard Prairie	4/30	0	0.0	14.0	2.4
Hyatt Prairie Reservoir	4/30	0	0.0	14.9	--
Kirk (PP&L)		e		--	--
Park Headquarters	4/30	151	60.1	83.6	61.2
Quartz Mountain	4/26	0	0.0	6.9	0.5
Seven Mile		e		--	--
State Line (Calif.)***		e		--	--
Strawberry	4/25	3	1.3	12.2	1.4[b]
Strawberry***		e		--	--
Summer Rim		e		--	--
Summer Rim***	4/26	30	9.9	31.0	15.6
Summer Rim Pillow*		e		--	--
Sycan Flat***		e		--	--
Taylor Butte	4/29	0	0.0	--	0.7[b]
LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Adin Mountain (Calif.)	4/29	11	3.6	23.5	4.8
Bald Mountain (Nev.)		e		--	--
Bear Flat Meadow***		e		--	--
Camas Creek	4/26	4	1.8	15.0	3.6
Cedar Pass (Calif.)	4/28	40	16.5	32.5	11.1
Colvin Creek***		e		--	--
Cox Flat***		e		--	--
Crowder Flat (Calif.)***		e		--	--
Dismal Swamp (Calif.)***		e		--	--
Finley Corrals***	4/26	24	7.9	19.8	9.0
Hart Mountain***		e		--	--
Little Bally Mtn. (Nev.)***		e		--	--
Mt. Bidwell (Calif.)		e		--	--
North Star (Calif.)		e		--	--
Patton Meadows***	4/26	36	12.6	25.8	13.3
Quartz Mountain	4/26	0	0.0	6.9	0.5
Sherman Valley***		e		--	--
Silver Creek		e		--	--
State Line (Calif.)***		e		--	--
Strawberry	4/25	3	1.3	12.2	1.4[b]
Strawberry***		e		--	--
Summer Rim		e		--	--
Summer Rim***	4/26	30	9.9	31.0	15.6
Summer Rim Pillow*		e		--	--
Sycan Flat***		e		--	--

BASIC DATA SUPPLEMENT 1

MAY 1, 1976

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave.[c]
HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	4/30	20	10.5	23.0	10.2
Blue Mtn. Springs Pillow*	4/30	--	14.0	--	--
Buck Pasture***		e		--	--
Buckskin Lake***		e		--	--
Call Meadows***		e		--	--
Delintment Lake		e		--	--
Denio Creek***		e		--	--
Disaster Peak (Nev.)		e		--	--
Emigrant Butte		e		--	--
Fish Creek		e		--	--
Fish Creek***		e		--	--
Fish Creek Pillow*		e		--	--
Hart Mountain***		e		---	--
Idlewild Camp Alternate	4/30	0	0.0	2.9	--
Izee Summit	4/29	8	3.0	17.1	1.9
Lake Creek R.S.		e		11.6	--
Oregon Canyon***		e		--	--
Rock Spring	4/29	0	0.0	5.8	0.3[b]
Silvies		e		--	--
Silvies***		e		--	--
Silvies Pillow*		e		--	--
Snow Mountain		e		--	--
Snow Mountain Pillow**	No report			--	--
Starr Ridge	4/29	4	2.1	8.1	0.4
Stinking Water	4/30	0	0.0	--	0.0
Trout Creek***		e		--	--
"V" Lake		e		--	--
LOWER COLUMBIA WATERSHEDS					
Blazed Alder**	4/30	--	27.7	--	--
Mt. Hood Test Site**	4/30	--	83.1	--	67.6
Mud Ridge	4/29	85	40.2	--	--
Mud Ridge Pillow*	4/29	--	49.2	--	--
North Fork Reservoir**	No report				
Still Creek	4/29	78	34.2	31.2	20.1

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (In.)	THIS YEAR: Water Cont. (In.)	PAST REC.: Water Content (inches): Last Yr.	PAST REC.: Water Content (inches): Ave.[c]

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 2

MAY 1, 1976

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average [c]
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8			--	--
Big Bend (Nev.)	6700	48	16.7	4/28	15.8	14.8	15.6
Blue Mountain Spring	5900	42	16.9	4/29	12.9	--	13.1
Mud Flat (Ida.)	5500	48	12.8			--	--
Rodeo Flat (Nev.)	6800	42	11.0	4/28	4.8	7.3	9.8
Taylor Canyon (Nev.)	6200	48	15.1	4/28	12.2	14.8	14.0
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mountain Summit	5100	36	16.8			--	14.8
Dooley Mountain	5430	36	9.2	4/28	4.6	--	6.8
Emigrant Springs	3925	48	22.3	4/29	20.7	--	21.2
Ladd Summit	3730	48	18.9	4/30	11.3	--	12.3
Moss Springs	5850	36	25.8	4/28	15.2	14.1	15.9
Tollgate	5070	48	23.6	4/28	17.4	--	19.0
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	4/30	12.5	--	13.5
Emigrant Springs	3925	48	22.3	4/29	20.7	--	21.2
Tollgate	5070	48	23.6	4/28	17.4	--	19.0
UPPER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	4/30	12.5	--	13.5
Blue Mountain Spring	5900	42	16.9	4/29	12.9	--	13.1
Blue Mountain Summit	5100	36	16.8			--	14.8
Derr	5670	24	9.0			--	--
Marks Creek	4540	36	14.1	5/3	13.4	13.4	13.3
Snow Mountain	6300	48	16.7			--	--
Starr Ridge	5150	36	10.6	4/29	10.6	--	10.4
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0			--	--
Marks Creek	4540	36	14.1	5/3	13.4	13.4	13.3
Snow Mountain	6300	48	16.7			--	--
KLAMATH WATERSHEDS							
Quartz Mountain	5230	48	15.3	4/26	9.1	8.1	9.5
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	4/26	11.8	11.3	13.1
Quartz Mountain	5230	48	15.3	4/26	9.1	8.1	9.5
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	4/29	12.9	12.1	13.1
Silvies	6900	48	16.4			--	--
Snow Mountain	6300	48	16.7			--	--
Starr Ridge	5150	36	10.6	4/29	10.6	10.6	10.4
Willow-Bald	5000	24	6.6	No report		6.6	6.1

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 3

MAY 1, 1976

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precip-itation	Last Year	Average [i]
Camas Creek (Lake County)	5825	From 3/31 to 4/26	1.45		
County Line (Umatilla County--Starkey Hdqs.)	4800	From 3/30 to 4/30	2.00		
Fish Lake (Jackson County)	4865	From ___ to 4/26	0.60		
Marks Creek (Crook-Wheeler Cos.)	4540	From 3/29 to 5/3	1.60		
Quartz Mt. Summit (Lake County)	6300	From 3/31 to 4/26	1.40		
Strawberry (Lake County)	5760	From 3/27 to 4/25	1.00		

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

OWYHEE, MALHEUR WATERSHEDS (1)

Owyhee River

Number	Name	Sec	Twp	Rge	Elev
[illegible]	Antelope Ridge (Ida)	20	8S	1E	5900
[illegible]	Battle Creek (Ida)	10	11S	1E	5700
[illegible]	Bear Creek (Nev)	31	46N	58E	7800
[illegible]	Big Bend (Nev)	30	45N	56E	6700
[illegible]	Buckskin, Lower (Nev)	25	45N	39E	6700
[illegible]	Buckskin, Upper (Nev)	11	45N	39E	7200
[illegible]	Bull Basin (Ida)	29	12S	5W	5600
[illegible]	Columbia Basin (Nev)	31	44N	53E	6650
[illegible]	Disaster Peak (Nev)	8	47N	34E	6500
[illegible]	Fawn Creek (Nev)	2	45N	52E	7000
[illegible]	Fish Creek	4	33S	33E	7900
[illegible]	Fox Creek (Nev	33	46N	55E	6800
[illegible]	Fry Canyon (Nev)	31	43N	54E	6700
[illegible]	Gold Creek (Nev)	31	45N	56E	6600
[illegible]	Granite Peak (Nev)	22	44N	39E	7800
[illegible]	Hyde Pasture (Ida)	31	8S	2W	5800
[illegible]	Jack Creek, Lower (Nev)	18	42N	53E	6800
[illegible]	Jack Creek, Upper (Nev)	9	42N	53E	7250
[illegible]	Jack Peak (Nev)	28	42N	53E	8420
[illegible]	Jordan Valley	2	30S	46E	4390
[illegible]	Laurel Draw (Nev)	20	45N	53E	6700
[illegible]	Lookout Butte	2	40S	47E	5650
[illegible]	Louse Canyon	27	40S	44E	6440
[illegible]	Martin Creek (Nev)	18	44N	40E	6700
[illegible]	Merritt Mountain (Nev)	10	46N	54E	7000
16H3AP	Midas (Nev)	18	39N	46E	7200
16G7MP	Mud Flat (Ida)	34	9S	2W	5500
17G5a	Oregon Canyon	8	40S	40E	6950
17H6a	Quinn Ridge (Nev)	9	47N	41E	6300
16G11a	Red Canyon (Ida)	32	11S	4W	6650
15H6MP	Rodeo Flat (Nev)	36	43N	53E	6800
15H3A	76 Creek (Nev)	6	44N	58E	7100
16F3AP*	Silver City (Ida)	6	5S	3W	6400
18G1PA	Silvies	35	32S	33E	6900
16G1P	South Mountain No.2 (Ida)	10	8S	5W	6340
15H19a	Stag Mountain (Nev)	32	41N	58E	7800
16F6a	Succor Creek (Ida)	25	3S	5W	6100
15H9MP	Taylor Canyon (Nev)	35	39N	53E	6200
16H7a	Toe Jam (Nev)	29	40N	50E	7700
15H8	Tremewan Ranch (Nev)	9	39N	55E	5700
16G4MA	Triangle (Ida)	25	7S	3W	5150
18G5a	Trout Creek	10	41S	38E	7800
18G7a	"V" Lake	31	35¼S	32¼E	6600
16G12a	Vaught Ranch (Ida)	10	11S	1W	5950
16G13a	War Eagle (Ida)	20	5S	3W	7700

Malheur River

Number	Name	Sec	Twp	Rge	Elev
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18F6a	Buck Pasture	28	29S	35E	5300
18E21a	Bully Creek	11	17S	37E	5300
18F7a	Call Meadows	29	20S	33E	5340
17F2a	Cottonwood-Indian	3	19S	39E	4320
18E19M	Crane Prairie	24	16S	34E	5375
18E20	Eldorado Pass	20	14S	38E	4600
18E26a	Flag Prairie	32	16S	36E	4750
18E18	Lake Creek	10	16S	33½E	5200
18E22a	Logan Valley	13	16S	33½E	5100
18F1	Rock Spring	23	18S	32E	5100
18E32p*	S. Fk. Willow Cr.	2	16S	37E	5500
18F4P	Stinking Water	34	21S	34E	4800

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (2)

Burnt River

Number	Name	Sec	Twp	Rge	Elev
18E13M	Blue Mountain Summit	6	12S	36E	5098
17E1MP	Dooley Mountain	32	11S	40E	5430
18E20	Eldorado Pass	20	14S	38E	4600
18E8	Gold Center	21	9S	36E	5340
18E9P	Tipton	34	10S	35E	5100

Powder River

Number	Name	Sec	Twp	Rge	Elev
18E1P	Anthony Lake	18	7S	37E	7125
18E5	Bourne	33	8S	37E	5800
17E1MP	Dooley Mountain	32	11S	40E	5430
18E3	Eilertson Meadows	18	8S	38E	5400
18E8	Gold Center	21	9S	36E	5340
18E6A	Goodrich Lake	4	9S	38E	6775
18E29	Intake House	5	8S	38E	4930
17012m	Ladd Summit	5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200
18E30	Little Antone	1	7S	37E	5000
18E28	Power Plant	33	7S	38E	3990
1707P	Taylor Green	3	6S	42E	5740

Pine Creek

Number	Name	Sec	Twp	Rge	Elev
1708	Schneider Meadows	35	6S	45E	5400

Grande Ronde River

Number	Name	Sec	Twp	Rge	Elev
1701	Aneroid Lake No. 1	16	4S	45E	7480
1702P	Aneroid Lake No. 2	16	4S	45E	7300
18E1P	Anthony Lake	18	7S	37E	7125
17010a	Bald Mountain	14 & 15	4S	41E	6700
18D9	Beaver Reservoir	8	5S	37E	5150
1808P	County Line	28	4S	34E	4800
1806P	Lucky Strike	28	3S	32E	5050
1805	Meacham	24	1S	35E	4300
17013a	Mirror Lake	34	4S	44E	8200
1706M	Moss Spring	28	3S	41E	5850
18D7	Schoolmarm	28	4S	34E	4775
17011a	Standley	21	2S	42E	7400
1707P	Taylor Green	3	6S	42E	5740
18D3	Tollgate	32	4N	38E	5070
17016a	TV Ridge No. 2	12	2S	43E	7000

Imnaha River

Number	Name	Sec	Twp	Rge	Elev
1701	Aneroid Lake No. 1	16	4S	45E	7480
1702P	Aneroid Lake No. 2	16	4S	45E	7300
17014a	Big Sheep	33	4S	46E	6200

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)

Umatilla River

Number	Name	Sec	Twp	Rge	Elev
1902P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
18D20	Bowman Springs	29	2S	35E	4580
20E4	Butte Creek Summit	5	8S	22E	3930
1804M	Emigrant Springs	29	1N	35E	3925
18D19	High Ridge	31	3N	38E	4150
1806P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24	1S	35E	4300
1803	Tollgate	32	4N	38E	5070

Walla Walla River

Number	Name	Sec	Twp	Rge	Elev
18D16	Blue Mountain Camp	35	4N	37E	4300
18D3	Tollgate	32	4N	38E	5070

Willow Creek

Number	Name	Sec	Twp	Rge	Elev
1902P	Arbuckle Mountain	33	4S	29E	5400
18E1P	Anthony Lake	18	7S	37E	7125

LEGEND

1902	SNOW COURSE ONLY
1902M	SNOW COURSE AND SOIL MOISTURE
1902MA	SNOW COURSE, SOIL MOISTURE AND AERIAL MARKER
1902A	SNOW COURSE AND AERIAL MARKER
1902m	SOIL MOISTURE ONLY
1902a	AERIAL MARKER ONLY
1902P	SNOW COURSE AND PRECIPITATION GAGE
1902p	PRECIPITATION GAGE ONLY
1902*	RADIO TELEMETRY

UPPER JOHN DAY WATERSHEDS (4)

Upper John Day River

Number	Name	Sec	Twp	Rge	Elev
1902P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18E13M	Blue Mountain Summit	6	12S	36E	5098
20E4	Butte Creek Summit	5	8S	22E	3930
19E3MP	Derr	14	13S	23E	5670
18E8	Gold Center	21	9S	36E	5340
18E24a	Indian Cr. Butte	5	15S	33E	6550
19E9P	Izee Summit	28	16S	29E	5293
1806P	Lucky Strike	28	3S	32E	5050
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
18E7a	Olive Lake	14	9S	34E	6000
18D7	Schoolmarm	28	4S	34E	4775
19F1*	Snow Mountain	1	19S	26E	6220
19E7M	Starr Ridge	20	15S	31E	5150
18E9P	Tipton	34	10S	35½E	5100

UPPER DESCHUTES, CROOKED WATERSHEDS (5)

Upper Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21E22	Bald Peter	29	10S	9E	5400
21F8	Caldwell Ranch	30	21S	8E	4400
22F3	Cascade Summit	7	23S	6E	4880
21F11	Chemult	21	27S	8E	4760
21E6	Hogg Pass	24	13S	7½E	4755
21F4	Hungry Flat	29	18S	11E	4400
21F6*	Irish-Taylor	25	20S	6E	5500
21E25a	Lionshead	1	10S	8E	5400
21F10	New Crescent Lake	11	24S	6E	4800
21E16	New Dutchman Flat #2	21	18S	9E	6400
21E23	Racing Creek	15	10S	9E	4800
22F14*	Summit Lake	33	24S	5½E	5600
21F3	Tangent	28	18S	10E	5400
21E15	Three Creeks Butte	27	16S	9E	5200
21E13*	Three Creeks Meadows	34	16S	9E	5650
22F2P	Waldo Lake	15	21S	6E	5600
21E24a	Whitewater Meadow	17	10S	9E	4160

Crooked River

Number	Name	Sec	Twp	Rge	Elev
19E3MP	Derr	14	13S	23E	5670
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
19F1*	Snow Mountain	1	19S	26E	6220
19E4	Tamarack	8	15S	25E	4800

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS (6)

Hood River

Number	Name	Sec	Twp	Rge	Elev
2106P	Brooks Meadows	2	2S	10E	4300
21025	Cooper Spur	6	2S	10E	3490
2101	Greenpoint Reservoir	27	2N	9E	3200
21020	Knebal Springs	31	1S	11E	3850
2108*	Phlox Point	7	3S	9E	5400
2104	Red Hill	20	1S	9E	4400
2109	Still Creek	25	3S	8½E	3670
21028	Switchback	28	1S	9E	3255
2107P	Tilly Jane	15	2S	9E	6000
21021	Ulrich Ranch Junction	28	1S	11E	3350
21030	Umbrella Falls	3	3S	9E	5400

Mile Creeks - Mosier Creek

Number	Name	Sec	Twp	Rge	Elev
2106P	Brooks Meadows	2	2S	10E	4300
21020	Knebal Springs	31	1S	11E	3850
21021	Ulrich Ranch Junction	28	1S	11E	3350

Lower Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21012	Clear Lake	29	4S	9E	3500
21022	Clear Lake Experimental	29	4S	9E	3500
21E6	Hogg Pass	24	13S	7½E	4755

LOWER COLUMBIA WATERSHEDS (7)

Bull Run River

Number	Name	Sec	Twp	Rge	Elev
21033*	Blazed Alder	5	2S	8E	3650

Sandy River

Number	Name	Sec	Twp	Rge	Elev
21035	Mud Ridge	1	4S	8½E	3800
21034	North Fork Reservoir	24	1N	6E	3120
2108*	Phlox Point	7	3S	9E	5400
2109	Still Creek	25	3S	8½E	3670

WILLAMETTE WATERSHEDS (8)

Clackamas River

Number	Name	Sec	Twp	Rge	Elev
21013	Clackamas Lake	35	5S	8½E	3400
21012	Clear Lake	29	4S	9E	3500
21016	Lake Harriet	4	6S	7E	2045
21014P*	Peavine Ridge	14 & 15	6S	7E	3500
2108*	Phlox Point	7	3S	9E	5400
2109	Still Creek	25	3S	8½E	3670
21017	Timothy Lake	26	5S	8E	3295

Santiam River

Number	Name	Sec	Twp	Rge	Elev
22E1	Detroit (City)	1	10S	5E	1610
22E2	Detroit Dam	7	10S	5E	1580
21E6	Hogg Pass	24	13S	7½E	4755
21E4	Marion Forks	29	11S	7E	2600
22E3	Mill City	29	9S	3E	826
21E5	Santiam Junction	14	13S	7E	3750
21E3	Whitewater Bridge	20	10S	7E	2175

McKenzie River

Number	Name	Sec	Twp	Rge	Elev
21E8	Dead Horse Grade	13	16S	7E	3700
22E4	Lost Creek Ranch	19	16S	7E	1956
21E7	McKenzie	34	15S	7½E	4800
22E5	McKenzie Bridge	13	16S	5E	1372
22E6	Vida	28	16S	2E	800
21E9	White Branch Slide	15	16S	7E	2700

Middle Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F3	Cascade Summit	7	23S	6E	4880
22F8	Lookout Point Dam	13	19S	1W	750
22F6	McCredie Springs	36	21S	4E	2120
22F7	Oakridge	16	21S	3E	1310
22F5	Railroad Overpass	21	22S	5E	2750
22F4	Salt Creek Falls	32	22S	5½E	4000
22F14*	Summit Lake	33	24S	5½E	5600
22F2P	Waldo Lake	15	24S	6E	5600

Coast Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F10	Golden Curry Creek	1	23S	1E	3136
22F13	Layng Creek R.S.	31	21S	1E	1200
22F12	Lund Park	22	22S	1E	1740
22F11	Weaver Creek	35	22S	1E	2440

Mary's River

Number	Name	Sec	Twp	Rge	Elev
23E1	Mary's Peak	21	12S	7W	3620

Luckiamute River

Number	Name	Sec	Twp	Rge	Elev
23E2	Laurel Mountain	6	8S	7W	3000
23E3	Valsetz Summit	3	9S	7W	2600

Tualatin River

Number	Name	Sec	Twp	Rge	Elev
2302*	Seine Creek	34	1N	5W	2000
2301*	Saddle Mountain	25	1N	6W	3250

ROGUE, UMPQUA WATERSHEDS (9)

Rogue River

Number	Name	Sec	Twp	Rge	Elev
23G4P	Althouse	17	41S	7W	4530
22G6	Annie Spring	19	31S	6E	6018
22G28	Beaver Dam Creek	1	38S	4E	5100
22G21P	Big Red Mountain	31	40S	1W	6250
22G13P	Billie Creek Divide	30	36S	5E	5300
22G30	Caliban	16	40S	1E	6500
22G27	Deadwood Junction	8	38S	4E	4600
22F19	Diamond-Crater Summit	3	29S	6E	5800
22G14P	Fish Lake	3	37S	4E	4665
22G12	Fourmile Lake	9	36S	5E	6000
23G3	Grayback Peak	9	40S	5W	6000
22G26	Howard Prairie	32	38S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G22	Little Red Mountain	25	40S	2W	6500
22G31	Mt. Ashland Switchback	15	40S	1E	6400
23G14	Mule Creek	8	32S	9W	3680
23G5	Page Mountain	5	41S	7W	4045
22G5	Park Headquarters	8	31S	6E	6550
22G11	Seven Lakes No. 2	26	33S	5E	6200
22G2	Silver Burn	30	30S	4E	3720
22G20	Siskiyou Summit	17	40S	2E	4630
22G32	Ski Bowl Road	22	40S	1E	6000
22G9	South Fork Canal	12	33S	3E	3500
22G1	Whaleback	4	31S	2E	5025

Umpqua River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F18P	Diamond Lake	29	27S	6E	5315
23G8	King Mountain No. 1	5	33S	4W	4500
23G9	King Mountain No. 2	4	33S	4W	4000
23G10	King Mountain No. 3	33	32S	4W	3648
23G11	King Mountain No. 4	33	32S	4W	3049
23G12	King Mountain No. 5	29 & 28	32S	4W	2380
23G13	King Mountain No. 6	20	32S	4W	1820
22F16	North Umpqua	19	26S	6E	4215
22F23	Red Butte No. 1	36	27S	2W	4560
22F24	Red Butte No. 2	30	27S	1W	4000
22F25	Red Butte No. 3	30	27S	1W	3500
22F26	Red Butte No. 4	30	27S	1W	3000
22F27	Red Butte No. 5	20	27S	1W	2500
22F28	Red Butte No. 6	17	27S	1W	2000
22F17	Trap Creek	1	27S	4E	3800
22G1	Whaleback	4	31S	2E	5025

KLAMATH WATERSHEDS (10)

Klamath River

Number	Name	Sec	Twp	Rge	Elev
22G6	Annie Spring	19	31S	6E	6018
22G13P	Billie Creek Divide	30	36S	5E	5300
21F11	Chemult	21	27S	8E	4760
22G24*	Cold Springs Camp	12	35S	5E	6100
20G12a	Crazyman Flat	9	34S	15E	6100
20H2a	Crowder Flat (Cal)	30	47N	11E	5200
22F19	Diamond-Crater Summit	3	29S	6E	5800
21F18	Diamond Lake Jct. (97)	1	29S	7E	4600
21G6a	Dog Hollow	1	40S	14E	4900
20G14a	Finley Corrals	11	36S	16E	6000
22G12	Fourmile Lake	9	36S	5E	6000
21G4P	Gerber	12	39S	13E	4850
22G26	Howard Prairie	32	38S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G15	Lake of the Woods	11	37S	5E	4960
22G5	Park Headquarters	8	31S	6E	6550
20G6MP	Quartz Mountain	2	38S	16E	5320
22G11	Seven Lakes No. 2	26	33S	5E	6200
22G33	Seven Mile	20	33S	6E	5725
20H1a	State Line (Cal)	21	48N	11E	5750
20G9AP	Strawberry	4	40S	16E	5760
20G2AP	Summer Rim	23	33S	16E	7100
20G13a	Sycan Flat	25	31S	14E	5500
21G3P	Taylor Butte	21	33S	11E	5100

Pacific Power and Light Company's Snow Stations

Number	Name	Sec	Twp	Rge	Elev
3	Chiloquin (PP&L)	34	34S	7E	4187
4	Crystal (PP&L)	26	34S	6E	4200
5	Fort Klamath (PP&L)	22	33S	7½E	4150
8	Harriman Lodge (PP&L)	3	36S	6E	4200
6	Kirk (PP&L)	1	33S	7E	4533

LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)

Goose Lake

Number	Name	Sec	Twp	Rge	Elev
20G15a	Bear Flat Meadow	27	36S	19E	5900
20G8MP	Camas Creek	5	39S	21E	5720
20G11A	Cox Flat	16	37S	18E	5750
20H2a	Crowder Flat (Cal)	30	47N	11E	5200
20H3a	Dismal Swamp (Cal)	31	48N	16E	7200
20G17a	Patton Meadow	28	38S	18E	6800
20G6MP	Quartz Mountain	2	38S	16E	5320
20H1a	State Line (Cal)	21	48N	11E	5750
20G9AP	Strawberry	4	40S	16E	5760
20G16a	Willow Creek	13	40S	21E	6020

Abert Lake

Number	Name	Sec	Twp	Rge	Elev
20G15a	Bear Flat Meadow	27	36S	19E	5900
20G18ap	Colvin Creek	12	36S	21E	6550
20G11A	Cox Flat	16	37S	18E	5750
20G14a	Finley Corrals	11	36S	16E	6000
20G6MP	Quartz Mountain	2	38S	16E	5320
20G10a	Snerman Valley	15	37S	21E	6600

Summer Lake

Number	Name	Sec	Twp	Rge	Elev
20G2AP	Summer Rim	23	33S	16E	7100

Silver Lake

Number	Name	Sec	Twp	Rge	Elev
21F2P	Silver Creek	25 & 26	29S	13E	4900
20G13a	Sycan Flat	25	31S	14E	5500

Warner Lake

Number	Name	Sec	Twp	Rge	Elev
20G8MP	Camas Creek	5	39S	21E	5720
20H3a	Dismal Swamp (Cal)	31	48N	16E	7200
19G1a	Hart Mountain	1	36S	25E	6350
20G10a	Sherman Valley	15	37S	21E	6600
20G16a	Willow Creek	13	40S	21E	6020

Guano Lake

Number	Name	Sec	Twp	Rge	Elev
19H1	Bald Mountain (Nev)	17	45N	21E	6720
19G1a	Hart Mountain	1	36S	25E	6350
19H4a	Little Bally Mt. (Nev)	8	45N	19E	6600

HARNEY BASIN WATERSHED (12)

Silvies River - Silver Creek

Number	Name	Sec	Twp	Rge	Elev
18F7a	Call Meadows	29	20S	33E	5340
19F2	Delintment Lake	28	19S	26E	5600
19F3	Emigrant Butte	14	21S	27E	5000
18F3P	Idlewild Camp	27	20S	31E	5200
19E9P	Izee Summit	28	16S	29E	5293
18F1	Rock Spring	23	18S	32E	5100
19F1*	Snow Mountain	1	19S	26E	6220
19E7M	Starr Ridge	20	15S	31E	5150
18F4P	Stinking Water	34	21S	34E	4800

Donner Und Blitzen River

Number	Name	Sec	Twp	Rge	Elev
18F6a	Buck Pasture	28	29S	35E	5300
18G2PA	Fish Creek	4	33S	33E	7900
19G1a	Hart Mountain	1	36S	25E	6350
18G1PA	Silvies	35	32S	33E	6900
18G7a	"V" Lake	31	35 S	32¼E	6600

Trout and Whitehorse Creeks

Number	Name	Sec	Twp	Rge	Elev
18G6a	Denio Creek	14	41S	34E	6000
18H1	Disaster Peak (Nev)	8	47N	34E	6500
17G5a	Oregon Canyon	8	40S	40E	6950
18G5a	Trout Creek	10	41S	38E	7800

Harney Lake

Number	Name	Sec	Twp	Rge	Elev
18G8a	Buckskin Lake	25	29S	30E	5200

Map and Index to OREGON SNOW COURSES

The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE
- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon Department Of Water Resources
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

FEDERAL
- Department of Agriculture
  - Cooperative Extension Service
  - Forest Service
  - Soil Conservation Service
- Department of Commerce
  - NOAA, National Weather Service
- Department of the Interior
  - Bonneville Power Administration
  - Bureau of Land Management
  - Bureau of Revlamation
  - Fish and Wildlife Service
  - Geological Survey
- Department of National Defense
  - Corps of Army Engineers

PUBLIC UTILITIES
- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES
- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS
- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale - Oregon Irrigation District
- Warmsprings Irrigation District

PRIVATE ORGANIZATIONS
- The Crag Rats, Hood River, Oregon

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